Results of the Transit Service Characteristics
Task Force Exercise

As part of the Multi-Modal Transportation effort, a Transit Service Characteristics Task Force Exercise was given to the 16-Member Multi-Modal Task Force to gauge their level of preference for a range of transit characteristics. Context for this exercise was given to the Task Force Members through a cover letter. This letter explained that planning is largely about making choices and that rarely are enough resources available to fully fund and implement all of the programs and facilities that we may wish to operate and build. This reality is no more apparent than in the field of transportation planning. Transportation services and facilities are always constrained by resources, a simple fact of planning such programs. Given this, in addressing Lincoln's and Lancaster County's future transit services as part of the Multi-Modal Transportation Plan, it is important that the Multi-Modal Transportation Task Force clearly articulate its collective priorities for such services.

The exercise was designed to help achieve this objective. It allowed the Task Force Members to provide their preferences on what transit service characteristics they view as most important to the community and for the Multi-Modal Transportation Plan. A copy of this exercise is included in this report as Appendix A for review.

Each Member was asked to compare eight (8) transit service characteristics and indicate their preference for each characteristic over another. Results were tabulated for each completed survey and then aggregated to indicate an overall preference and priority level by the Task Force for each transit characteristic. The transit service characteristics included in this exercise were as follow:

A. How frequently buses operate (shorter headways)
B. Hours per day buses operate (start and end time of service)
C. Geographic area serviced by fixed route operation (service to all of city)
D. Length of time it takes to reach your destination (total travel time for trip)
E. Not having to transfer (directness of trip)
F. Full service on weekends (Saturday and Sunday services)
G. Maintaining reasonable fare structure (not increasing fares)
H. How close is nearest bus stop (convenient boarding locations)

The above individual characteristics could be chosen a maximum of seven (7) times as a preferred option over the other characteristics. If a Task Force Member considered one option more important than another, then the score for that characteristic would be higher.

The number of times one particular characteristic was given preference over another was tabulated for each Task Force Member's completed survey. That individual preference number was then combined with the preference score for that characteristic from each Task Force Member to come up with an average preference score for each transit characteristic. Because there is a maximum score of 7 and a minimum score of 0, any score that averages out to be above 3.5 indicates the Task Force considers that characteristic as more important, on average, than not. Also, each transit characteristic can be compared to another according to its average preference score as being more or less preferred by the Task Force.

The preference scores for each transit characteristic are tabulated and presented in graphic form below in Figure 1.
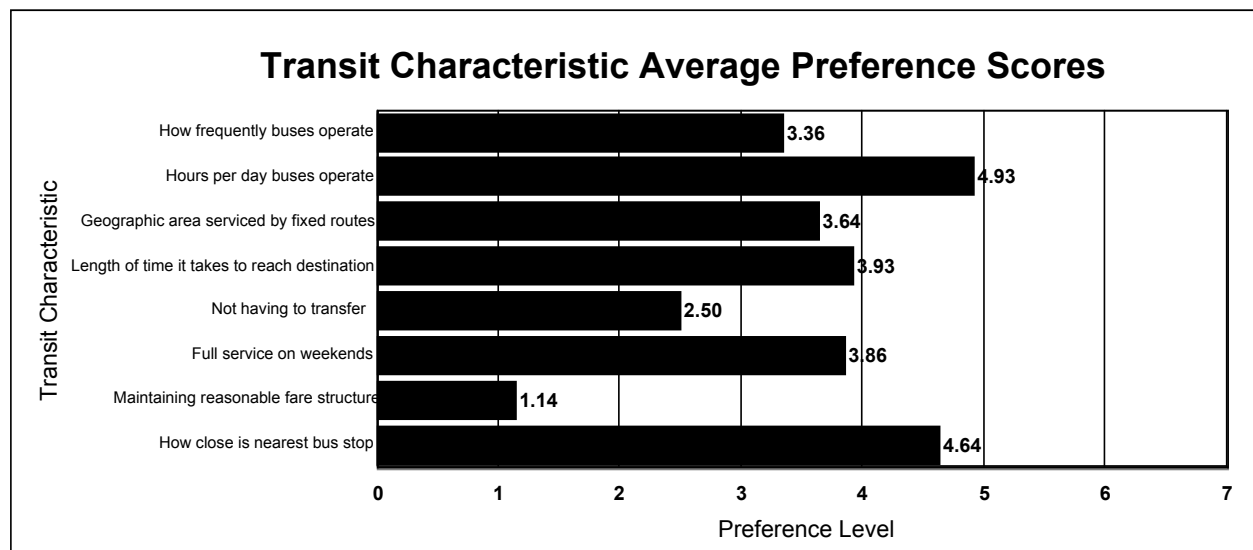

Figure 1: Transit Service Preference Exercise

The above results indicate that two transit characteristics are preferred over the others. With an average preference score of 4.93, "Hours per day buses operate" was considered the most preferred characteristic. "How close is nearest bus stop" scored the second highest in this exercise with a score of 4.64. These results may indicate that the ability to conveniently get to a bus stop at the origin and destination of a transit trip is most important in the minds of the Task Force, as is the flexibility to use the bus system at different hours of the day. This in general points to a desire that transit in Lincoln be a convenient mode of travel choice that can better rival the personal auto. Thus, expanded service hours and strategically located bus stops may be priorities for the Multi-Modal Transportation Plan. The third highest rated transit characteristic, at an average score of 3.93, was "Length of time it takes to reach destination." This is somewhat self-explanatory and indicates that once on the transit system, it is desired that someone be able to get to their destination quickly. Thus, an indirect route structure that contains many stops is less desirable. Express bus routes, and over time possibly bus rapid transit, may therefore be concepts to be considered as part of the Multi-
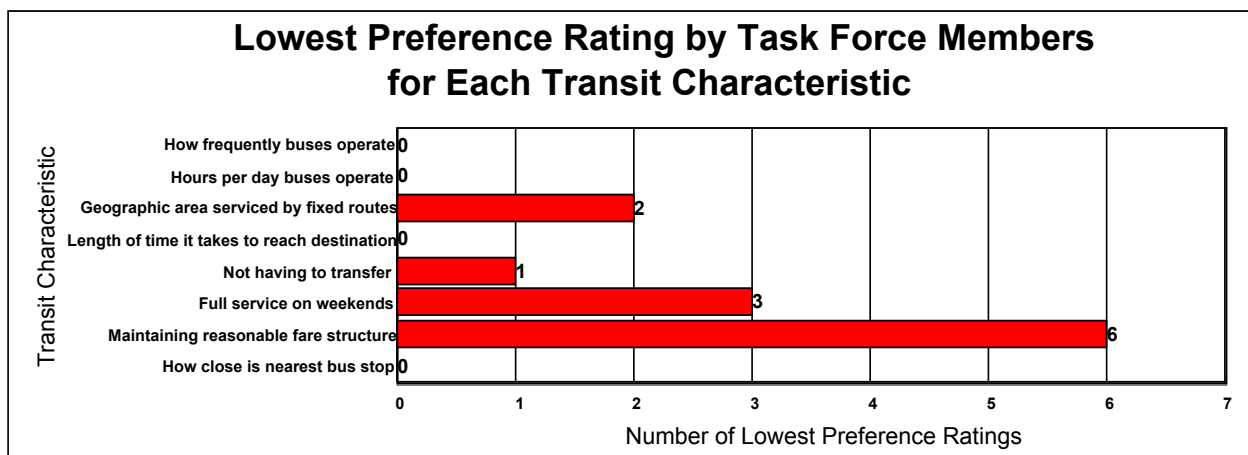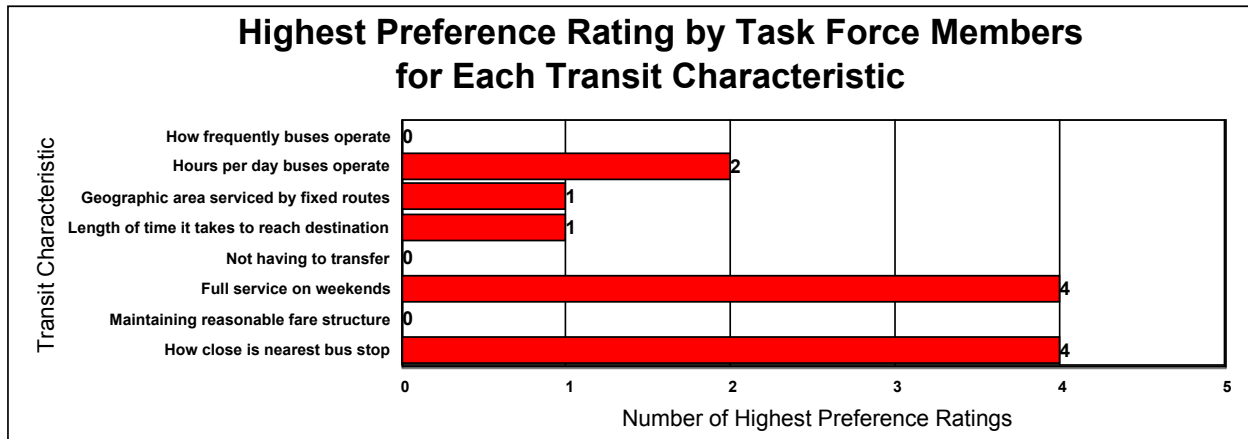
Modal Transportation Plan. Close behind in fourth, with a score of 3.86, was the "Full service on weekends." Similar to the results for expanded "Hours per day buses operate," the support for this characteristic indicates a desire to use the transit system different days of the week.

Conversely, "Maintaining reasonable fare structure" scored by far the lowest in this exercise with an average score of 1.14. This may indicate a general feeling by the Task Force that fare structure is not an important item to be addressed with the Multi-Modal Transportation Study. It is possible that most Task Force members individually do not view the current fare structure of the bus system to be financially burdensome to users, and that fares should be adjusted as inflation or changes in the level of service dictate. The other transit characteristics that scored below the 3.5 average preference threshold were "Not having to transfer," which scored 2.50, and "How frequently buses operate," which scored 3.36. The lower level of preference for not having to transfer is somewhat in conflict with the more highly supported desire to get to a destination as quickly as possible. If there are transfers involved in a transit trip, the length of trip normally will increase. This lower level of preference for not having to make transfers may indicate the belief that the ability to reach one's destination as quickly as possible can still be attained with an efficient transfer along the route, or possibly limiting the amount of needed transfers along a particular route. It does not appear that the transfer itself is necessarily objected to by the Task Force. In other words, if transfers are needed to better serve the system, then they should be used as long as they do not add significant time to the transit trip. As for the lower level of preference for how frequently buses operate, such results may indicate that shorter head-ways are less of a priority than is the level of convenience of bus stop locations and the amount of service time by hours of the day or days of the week is concerned.

Another informative way to view the results of this exercise, along with the average preference score, is to see which transit characteristics received the highest level of support by a Task Force Member, which would be a score of 7, and those that received the lowest score of 0. The following charts in Figure 2 and Figure 3 indicate these findings.

Figure 2: Lowest Preference Rating
Figure 3: Highest Preference Rating

Lowest Preference Rating by Task Force Members for Each Transit Characteristic

Highest Preference Rating by Task Force Members for Each Transit Characteristic

Transit Characteristic	Number of Highest Preference Ratings
How frequently buses operate	0
Hours per day buses operate	2
Geographic area serviced by fixed routes	1
Length of time it takes to reach destination	1
Not having to transfer	0
Full service on weekends	4
Maintaining reasonable fare structure	0
How close is nearest bus stop	4

As the results of the overall average scores would suggest, the lowest scoring characteristic, "Maintaining reasonable fare structure," received the most scores of zero (6). The second most scores of zero, or no preference, was three received by the "Full service on weekends" characteristic. What is interesting about this result is that this characteristic also tied for the most high scores of 7 with 4, thus making this characteristic the most variable as far as support from the Task Force is concerned. Finally, the other transit characteristic that tied for the most high scores of 7 was "How close is nearest bus stop." This characteristic was tied for the highest supported characteristic by average score and received strong support from the Task Force overall.

Appendix A

MULTI-MODAL TRANSPORTATION TASK FORCE
TRANSIT SERVICE
PAIRED-WEIGHTING EXERCISE

An exercise used to compare different items against each other to determine priorities.

TRANSIT SERVICE CHARACTERISTICS:

A. How frequently buses operate (shorter headways)

B. Hours per day buses operate (start and end time of service)

C. Geographic area serviced by fixed route operation (service to all of city)

D. Length of time it takes to reach your destination (total travel time for trip)

E. Not having to transfer (directness of trip)

F. Full service on weekends (Saturday and Sunday services)

G. Maintaining reasonable fare structure (not increasing fares)

H. How close is nearest bus stop (convenient boarding locations)

Please print your name (for inventory control only)

TRANSIT SERVICE CHARACTERISTICS
PREFERENCE SURVEY

Please circle one letter per box.

A	How frequently buses operate (shorter headways)	*or*
B	Hours per day buses operate (start and end time of service)	

A	How frequently buses operate (shorter headways)	*or*
C	Geographic area serviced by fixed route operation (service to all of city)	

A	How frequently buses operate (shorter headways)	*or*
D	Length of time it takes to reach your destination (total travel time for trip)	

A	How frequently buses operate (shorter headways)	*or*
E	Not having to transfer (directness of trip)	

A	How frequently buses operate (shorter headways)	*or*
F	Full service on weekends (Saturday and Sunday services)	

A	How frequently buses operate (shorter headways)	*or*
G	Maintaining reasonable fare structure (not increasing fares)	

A	How frequently buses operate (shorter headways)	*or*
H	How close is nearest bus stop (convenient boarding locations)	

B	Hours per day buses operate (start and end time of service)	or

C Geographic area serviced by fixed route operation (service to all of city)	

B Hours per day buses operate (start and end time of service)	or
D Length of time it takes to reach your destination (total travel time for trip)	

B Hours per day buses operate (start and end time of service)	or
E Not having to transfer (directness of trip)	

B Hours per day buses operate (start and end time of service)	or
F Full service on weekends (Saturday and Sunday services)	

B Hours per day buses operate (start and end time of service)	or
G Maintaining reasonable fare structure (not increasing fares)	

B Hours per day buses operate (start and end time of service)	or
H How close is nearest bus stop (convenient boarding locations)	

C Geographic area serviced by fixed route operation (service to all of city)	or
D Length of time it takes to reach your destination (total travel time for trip)	

C Geographic area serviced by fixed route operation (service to all of city)	or
E Not having to transfer (directness of trip)	

C Geographic area serviced by fixed route operation (service to all of city)	or
F Full service on weekends (Saturday and Sunday services)	

C Geographic area serviced by fixed route operation (service to all of city)	or

G   Maintaining reasonable fare structure (not increasing fares)

C   Geographic area serviced by fixed route operation (service to all of city)

or

H   How close is nearest bus stop (convenient boarding locations)

D   Length of time it takes to reach your destination (total travel time for trip)

or

E   Not having to transfer (directness of trip)

D   Length of time it takes to reach your destination (total travel time for trip)

or

F   Full service on weekends (Saturday and Sunday services)

D   Length of time it takes to reach your destination (total travel time for trip)

or

G   Maintaining reasonable fare structure (not increasing fares)

D   Length of time it takes to reach your destination (total travel time for trip)

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H   How close is nearest bus stop (convenient boarding locations)

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H   How close is nearest bus stop (convenient boarding locations)

F   Full service on weekends (Saturday and Sunday services)

or

G Maintaining reasonable fare structure (not increasing fares)	

F Full service on weekends (Saturday and Sunday services)	or
H How close is nearest bus stop (convenient boarding locations)	

G Maintaining reasonable fare structure (not increasing fares)	or
H How close is nearest bus stop (convenient boarding locations)	